

# Reducing the costs of verge management and increasing biodiversity



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# Drivers for change

**Budget reduction –  
systemic change  
needed**

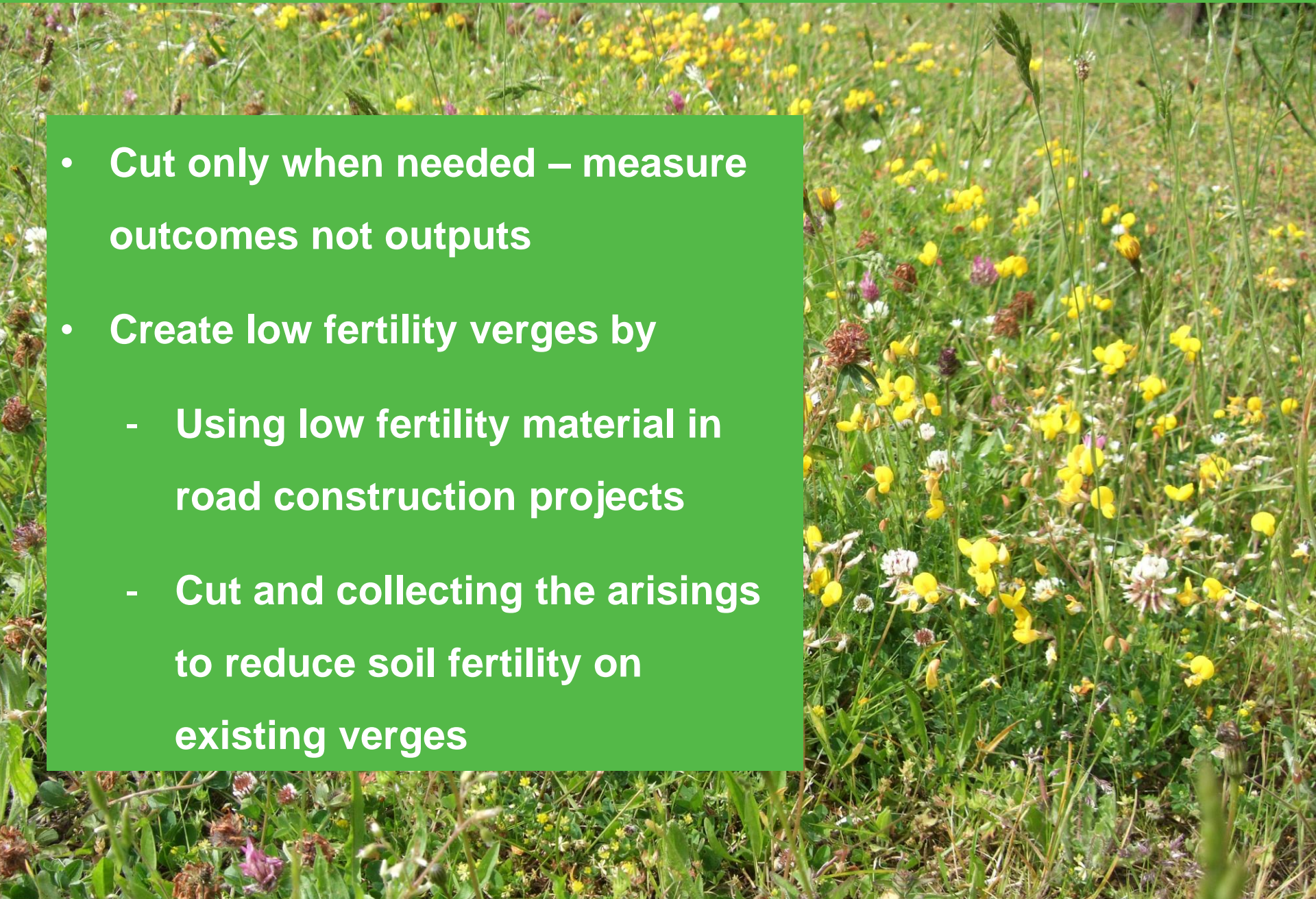
**Improving outcomes  
for the public –  
delivering policy aims**

**Reducing our carbon  
footprint**

**Enhancing wildlife  
and the landscape**

# The solution...

- **Cut only when needed – measure outcomes not outputs**
- **Create low fertility verges by**
  - **Using low fertility material in road construction projects**
  - **Cut and collecting the arisings to reduce soil fertility on existing verges**





**Weymouth Relief Road**



- Low fertility verges designed into scheme – 7ha
- Scatter of topsoil on most verges, <15mm, or no topsoil - £270 k saved
- Wildflower seed hand sown

# Road verges can provide ecological corridors alongside transport corridors



**In 6 years the Butterfly species list has more than doubled to over 30 species, which is over half of the British list**





**There are alternatives to mechanical mowers to maintain wide verges**





**Cut and leave arisings:**  
Lots of coarse grasses,  
few wildflowers



**Cut and remove:**  
Fine grasses and wildflowers



**Urban verge cut and collect**



**Disposal within  
the verge**





**Wildflowers  
flourishing on urban  
verges after just two  
years cut and collect**



**Urban verge - 19<sup>th</sup>  
October, last cut  
26<sup>th</sup> June.  
Cut twice in 2019**





**Cut and collect on rural roads**





Rytel collector flail



Disposal on site



**A354 Blandford Bypass now a County  
Wildlife Site**



**Retrofitting low fertility**



Savings on highway verge management in Dorset since 2014

The team are re-deployed to other work – e.g. ROW



# Take-home messages

Low fertility = high biodiversity  
Less grass to cut = cheaper

Disposal of arisings is an issue, but solutions are easier than you think

Grassland verges full of wildflowers are popular with the public and decision makers

Improves biodiversity and landscape quality - saves money - can be delivered anywhere in the UK.

**The opportunity to transform our environment is huge!**



Any questions ?



## Dorset Council Pollinators Action Plan 2019 – 2024

Insect pollinators play an essential role in providing pollination for many commercial crops and wild plant species, actions and functions which represent significant value to the UK economy. With a substantial agricultural sector, and extensive natural and semi-natural habitats within which pollinators are important, it is likely that Dorset receives a disproportionately high share of this economic value.

Many plants rely on insects to pollinate their flowers and so complete their reproductive cycle – most plants cannot set seed without being pollinated (receiving the pollen, usually from another flower). It has been calculated that one out of every three mouthfuls of the food we eat depends on pollination and the annual benefits of insect pollinators to the British Economy have been valued at £691 million (Living with Environmental Change, 2014).

However, pollinators such as bees, hoverflies, butterflies and moths are in decline. Pressures such as habitat loss and degradation, pests and diseases, pesticide use and climate change individually and in combination are having negative impacts on populations and, as a result, reducing their ability to provide valuable services to human populations.

Dorset Council has a legal duty, under the Natural Environment and Rural Communities Act (NERC) 2006, to have regard for the conservation of biodiversity in exercising their functions. The National Planning Policy Framework February 2019 Section 15 also makes it clear that planning policies and decisions should contribute to and enhance the natural and local environment. Therefore, Dorset Council will help to reduce this decline and where possible enhance populations through the adoption of this action plan. The Action Plan proposes a range of positive approaches which can be applied to the management of councils' assets, projects and decision-making processes in relation to the decline in pollinators, on Dorset Council land.

**The actions are subdivided into five themes:** As recommended by Buglife and Friends of the Earth 'Helping Pollinators Locally: Developing a local pollination Action Plan or Strategy':

The management of the council's green assets

1. Enhancement opportunities via new development on Council land
2. Opportunities via the Councils planning functions
3. Raising awareness
4. Monitoring, research and evidence



AREA OF MANAGEMENT	TYPE OF MANAGEMENT	ACTION AND EXPLANATION AS TO WHY	WHO NEED TO BE INVOLVED
<b>COUNCIL GREEN ASSETS: LAND AND BUILDING MANAGEMENT</b>			
<b>HIGHWAY VERGES</b>	Verge management  Includes new cycle and footpaths.	<p><b>Where appropriate 'cut and collect' will be the preferred option for mowing of the highway verges</b> - this will reduce the fertility and growth of the grass. This will also allow wildflowers to compete with grass for space to grow, therefore allowing more wildflowers on the verges. Over time less cutting will be required which will save money and the verges will look more attractive and provide good habitat for pollinators.</p> <p><b>Re-use of grass cuttings will be the preferred option where possible.</b> – to provide a sustainable approach</p> <p><b>Reduce the number of cuts undertaken</b> – this will allow longer periods of flowering and the opportunity for flowers to set seed, improving botanical diversity. Reducing the frequency of cutting also reduces our operational carbon footprint</p> <p><b>Provide training/awareness for on-site/ground staff regularly and when new staff employed</b> - to ensure management in relation to pollinators is understood, promoted and are carried out</p>	Greenspace team  Grounds team
	Grass management	<p><b>Some sowing of either spring and late summer wild flowering seed, annual flowery meadow or arable flower seed mixes</b> -to provide an increase in the number and variety of pollinators along the verges. The use of Yellow Rattle has already been successful in reducing grass vigour.</p> <p><b>Scarification of verges, where required prior to seeding will be carried out</b> – to improve sward diversity</p> <p><b>The use of wildflowers such as parasitic on grasses will take place each year in selected locations -</b></p>	Greenspace team  Grounds team
Tree and hedge management	<p><b>Hedges will be cut on a three-year rotation where possible. They will be cut less often (this will need to be in line with a good health and safety policy and existing environmental land management agreements)</b> – By cutting hedgerows less often it will allow longer periods for nectar rich species to be available to pollinators</p>	Greenspace team  Grounds team  Arb team	



		<p><b>Hedges will be maintained in the long term by ensuring additional appropriate management; some coppicing, cutting to ground level on a rotation basis – to ensure dense new growth from the bottom of the hedge, gap filling and hedge laying.</b></p> <p><b>Standing dead timber and habitat piles will be left in situ incorporated into banks and hedge bases -</b></p> <p><b>Any new/replacement planting will include species for both early spring flowers (such as goat and grey willows and blackthorn) and later spring flowers such as hawthorn and crab apple</b></p> <p><b>The hedge bases and banks will be buffered from cutting to create grassy margins, particularly on south-facing sides. If scrub such as bramble needs controlling, it will be cut late in the year</b></p> <p><b>Where appropriate on some south facing banks areas will be closely cut to create areas of short turf and bare ground</b></p>	
	Chemicals/Pesticides management	<p><b>Dorset Council will prohibit the use of Neonicotinoid pesticides on its land, where there are powers to enforce this -</b> Research suggests that Neonicotinoid pesticides are harmful to pollinators. To use alternatives will see an increase in pollinators</p> <p><b>The use of other chemicals such as the herbicide Glyphosate will be reviewed on an annual basis -</b> research now appears to have found links between the use of this herbicide and the decline of bees.</p>	<p>Greenspace team</p> <p>Grounds team</p> <p>Arb team</p>
<b>County Farms</b>	Chemicals/Pesticides management	<p><b>Dorset Farms will be an exception to the use of Neonicotinoid pesticides where existing tenancies are in place. However, information will be provided to encourage tenants not use Neonicotinoid pesticides. New tenants will be encouraged adopt the Council Council Policy and implement other actions to benefit pollinators -</b> Research suggests that Neonicotinoid pesticides are harmful to pollinators. To use alternatives will likely see an increase in pollinators.</p>	<p>The Dorset Council Farms Liaison Panel</p> <p>The Dorset Council Rural Practice team</p>
	Conservation management of key habitats	<p><b>The key principles for pollinators will be embedded in the Estate Management Plan – to ensure a consistent approach to pollinators</b></p>	<p>The Dorset Council Farms Liaison Panel</p> <p>The Dorset Council Rural Practice team</p>



		<p><b>New farm tenants will be provided with the Dorset Council pollination action plan with specific information on woodland, grassland, wetland and hedgerow management – to enable tenants to follow a consistent approach to pollinators</b></p> <p><b>Hedgerows will be cut less often and managed as above this, in line with a good health and safety policy and existing environmental land management agreements – to allow longer periods for nectar rich species to be available to pollinators</b></p>	Natural Environment team
SCHOOLS	Grass management	<p><b>Where appropriate ‘cut and collect’ will be the preferred option for mowing of non-sports pitches. Mowing regimes will be incorporated into SLA</b></p> <p><b>Provide training/awareness for on-site/ground - to ensure the workforce is fully informed and supportive of improving schools’ areas for pollinators</b></p> <p><b>Information to schools where groundwork done will be provided with information relating to schools and pollinators - <a href="http://polli-nation.co.uk/">http://polli-nation.co.uk/</a></b></p>	<p>Greenspace team</p> <p>Grounds team</p>
	Tree and hedgerow management	<p><b>Hedgerows will be cut less often, in line with a good health and safety policy and existing environmental land management agreements – to allow longer periods for nectar rich species to be available to pollinators</b></p>	<p>Greenspace team</p> <p>Grounds team</p> <p>Arb team</p>
	Shrub/flower management	<p><b>Manage existing shrub/flower beds to maximise flower period – to avoid some shrub areas being cut before or when in flower and therefore reducing their pollination value.</b></p> <p><b>Provide training/awareness for on-site/ground - to ensure the workforce is fully informed and supportive of improving schools’ areas for pollinators</b></p>	<p>Greenspace team</p> <p>Grounds team</p>
COUNTRYSIDE/WILDLIFE SITES	Verge management	<p><b>Where appropriate ‘cut and collect’ will be the preferred option for verge management - this will reduce the fertility and growth of the grass and allow wildflowers to compete with grass for space to grow, therefore allowing more wildflowers.</b></p> <p><b>Provide training/awareness for on-site/ground staff regularly and when new staff employed - to ensure management in relation to pollinators is understood, promoted and are carried out</b></p>	<p>Greenspace team</p> <p>Grounds team</p>
	Woodland, tree and hedge management	<p><b>Standing dead timber and habitat piles will be left in situ incorporated into banks and hedge bases – to encourage pollinators</b></p>	Greenspace team



		<p><b>Hedgerows will be cut less often, in line with a good health and safety policy and existing environmental land management agreements – to maintain and enhance the number of pollinators. By cutting hedgerows less often it will allow longer periods for nectar rich species to be available to pollinators</b></p>	<p>Grounds team</p> <p>Arb team</p>
	Grass management	<p><b>Regular sowing will take place each year of either spring and late summer wild flowering seed, annual flowery meadow seed and wildflowers parasitic on grasses in selected locations – to allow for an increase in the number and variety of pollinators</b></p>	<p>Greenspace team</p> <p>Grounds team</p>
	Conservation management	<p><b>Dorset Council will prohibit the use of Neonicotinoid pesticides on its land, where there are powers to enforce this - Research suggests that Neonicotinoid pesticides are harmful to pollinators. To use alternatives will see an increase in pollinators</b></p> <p><b>The use of other chemicals such as the herbicide Glyphosate will be reviewed on an annual basis - research now appears to have found links between the use of this herbicide and the decline of bees.</b></p>	<p>Greenspace team</p> <p>Grounds team</p> <p>Natural Environment Team</p>
<p><b>COUNCIL OFFICES, DEPOTS, LIBRARIES &amp; OTHER LAND HOLDINGS</b></p>	Grass management	<p><b>Where appropriate ‘cut and collect’ will be the preferred option for mowing grass at council owned properties - this will reduce the fertility and growth of the grass. This will allow wildflowers to compete with grass for space to grow, therefore allowing more wildflowers on the verges. Over time less cutting will be required which will save money, with the verges will look more attractive and provide the right environment for pollinators.</b></p> <p><b>Re-use of grass cuttings will be the preferred option where possible. – to provide a sustainable approach</b></p> <p><b>Reduce the number of cuts undertaken – this will allow longer periods of flowering and flowers to set seed, improving botanical diversity.</b></p> <p><b>Provide training/awareness for on-site/ground staff regularly and when new staff employed - to ensure management in relation to pollinators is understood, promoted and are carried out</b></p> <p><b>Where appropriate develop butterfly gardens - as example of best practice</b></p>	<p>Greenspace team</p> <p>Grounds team</p> <p>Natural Environment Team</p>
	Woodland, tree and hedge management	<p><b>Standing dead timber and habitat piles will be left in situ incorporated into banks and hedge bases</b></p>	<p>Greenspace team</p>



		<b>Hedgerows will be cut less often, in line with a good health and safety policy and existing environmental land management agreements – to maintain and enhance the number of pollinators.</b> By cutting hedgerows less often it will allow longer periods for nectar rich species to be available to pollinators	Grounds team
	Chemicals	<b>Dorset Council will prohibit the use of Neonicotinoid pesticides on its land, where there are powers to enforce this</b> - Research suggests that Neonicotinoid pesticides are harmful to pollinators. To use alternatives will see an increase in pollinators	Greenspace team Grounds team
<b>EXISTING BUILDINGS AND STRUCTURES</b>	Development	<b>Create opportunities for ‘greening’ buildings and other structures by retro fitting</b> - Green roofs, green walls, sustainable urban drainage systems are just a few of the opportunities to help pollinators. Smaller scale enhancements such as installation of bug/bee hotels or pollinator friendly hanging baskets are good examples	Natural Environment team  Landscape Architect  Dorset Property
	Project development and delivery	<b>Get advice at inception stages of all new infrastructure projects from the Dorset Council Natural Environment Team and Dorset Council Landscape Architects – to ensure infrastructure projects can benefit and increase wildlife/pollinators</b>  Planning for pollinators will be considered at an early stage of any infrastructure projects	Highways team  Dorset Property  Natural Environment team
<b>NEW DEVELOPMENT ON COUNCIL LAND: ENHANCEMENT OPPORTUNITIES</b>			
<b>HIGHWAY VERGES - INCLUDES NEW CYCLE AND FOOTPATHS</b>	Tree and shrub planting	<b>Where opportunities arise, flowering trees will be planted rather than other species that do not attract pollinators</b> - Flowering trees such as cherry, apple, hawthorn, blackthorn and willow will provide more nectar for pollinators to thrive. In urban areas some non-native species which extend the flowering season will also be included.	Greenspace team  Grounds team  Arb team  Natural Environment team
	Soil and seed	<b>Use of low fertility substrates will only be used on new verges and highway land. Sow with native and or flowery meadow seed</b>	Greenspace team  Grounds team  Highway contractors



			Natural Environment Team
<b>SCHOOLS AND OTHER NEW DEVELOPMENTS</b>	Tree and shrub planting	<b>Where opportunities arise, flowering trees will be planted rather than other species that do not attract pollinators</b> - Flowering trees such as cherry, apple, hawthorn, blackthorn and willow will provide more nectar for pollinators to thrive. In urban areas some non-native species which extend the flowering season will also be included.	Dorset Property Landscape Architects Natural Environment Team
	Soil and seed	<b>Use of low fertility substrates will only be used on new verges and highway land.</b> Sow with native and or flowery meadow seed to increase pollinators	Main/sub-contractors Dorset Property Landscape Architects Natural Environment Team (for advice)
	Conservation initiatives	<b>A range of landscape and biodiversity enhancements will be considered with any new conservation initiative</b> e.g. bug hotels, habitat piles, sensory gardens, wildflower meadows, perennial flower beds with species particularly attractive to bees, butterflies and moths – to increase pollinators	Landscape Services Design & Build Dorset Council contractors Dorset Property Landscape Architects Natural Environment Team (for advice)
<b>PLANNING CONTROL AND POLICY</b>			
<b>PLANNING AND DEVELOPMENT</b>		<b>Pollinator habitats are protected and enhanced in dealing with planning and development</b> - By using a set and agreed method within planning and development will ensure a consistent approach is taken when considering pollinators <b>New developments will result in net gain for pollinators.</b> - NET gain means there will be an overall increase in pollinators in Dorset	Environmental Advice Team Natural Environment Team



		<p><b>The Biodiversity Appraisal Protocol will be the preferred choice in dealing with pollinators in relation to planning developments</b> – to provide a clear, consistent approach under the current government regulations</p> <p><b>Advice will be provided at all stages of the planning process; pre-app, application stage and via planning policy advice and guidance</b> - current pressures to secure economic growth and new housing will constantly threaten many habitats of importance for pollinators. Providing advice at all parts of the process will ensure pollinators are considered at every stage</p> <p><b>A review or revision of existing plans and planning policy will be carried out regularly</b> - to ensure the habitats are recognised and given adequate protection</p> <p><b>Key populations of priority-listed pollinators (NERC Act, Section 41 species) and habitats, as well as locally threatened species will be protected through the planning process</b> - these species and habitats have been identified as being the most threatened and requiring conservation action across the country</p> <p><b>Planning guidance in relation to pollinators will be developed</b> - to ensure development results in net gain for pollinators and a consistent and up to date approach</p> <p><b>A Supplementary Planning Document linked with the Dorset Biodiversity Protocol will be developed</b> - to ensure development also provides a quantifiable benefit for pollinators</p> <p><b>Dorset Council Green Asset Guide is seen as an established guide for best practice</b> – this supports the corporate aim of safeguarding and enhancing Dorset’s unique environment and supporting the local economy by encouraging best sustainable practice in Landscape Planning, Design and Management</p> <p><b>Embed the actions from the pollinator action plan into the Green Infrastructure Strategy</b></p>	<p>Dorset Council Planning Officers</p> <p>Countryside Advice</p>
	Local Planning	<p><b>Advice will be provided on pollinators in the Local Plans</b> - to ensure the habitats are recognised and given adequate protection</p> <p><b>Ways to increase pollinators will be embedded into the Local Plans</b></p>	<p>Natural Environment Team</p>





MONITORING, RESEARCH AND EVIDENCE			
<b>MONITORING, RESEARCH AND EVIDENCE</b>		<p><b>Dorset Council will keep up to date on the latest scientific evidence on pollinator health and consider how respond to emerging research (e.g. on the impacts of light pollution on nocturnal pollinators) in its future decision-making, asset management and operational service planning</b> - This will ensure the council can respond to any emerging research e.g. the impacts of light pollution on nocturnal pollinators.</p> <p><b>Establish a Pollinator Group made up of key players, to review and monitor the action plan each year</b> - to ensure the action plan will be delivered on the ground and via the planning process and its progress and success is understood</p>	<p>Natural Environment Team</p> <p>Dorset Council Planning Team</p> <p>Dorset Property</p> <p>Greenspace team</p> <p>Grounds team</p> <p>Landscape Service</p> <p>Environmental Advice Team</p> <p>Arbs team</p>
COMMUNICATION			
<b>COMMUNICATIONS</b>	Raising awareness	<p><b>Promote our actions in relation to pollinators and work carried out by Dorset Council</b> - Local authorities have a major role to play in raising awareness of the importance of safeguarding our pollinators, enthusing and working with local people to help conserve pollinators.</p> <p><b>Raise awareness of the wider importance of pollinators to schools, town and parish councils, businesses and other stakeholders in our communities through established communication channels</b> – to ensure constant and a clear approach by Dorset Council</p> <p><b>Provide a sign posting service to the work with our partner organisations in this</b> e.g. AONBs, LNPs and with existing initiatives such as Buglife, Learning through Landscapes, Butterfly Conservation, Friends of the Earth, HedgeLink etc.</p> <p><b>Link with relevant national, regional and local social media campaigns which promote pollinators in Dorset</b></p>	<p>Dorset Council Communication Team,</p> <p>Pollinator Group</p>